



TEST REPORT RAPPORTO DI PROVA

DEGREE OF PROTECTION PROVIDED BY ENCLOSURES (IPX7) on SOCKET BOX VERIFICA DEL GRADO DI PROTEZIONE (IPX7) su CALOTTA PRESA

Customer (Richiedente):

- Dept./Firm (Ente/Società): 4 BOX S.r.l.
- Mr./Mrs (Sig./Sig.ra.): Pietro Malanca
- Address (Indirizzo): P.le Segesta 15
20148 Milano (MI)

Test Request Form no.:
Modulo Richiesta Prova n.:
1001241

Test Report sent to:
Rapporto inviato a:
Sig. Pietro Malanca

Name and Signature of the test engineer:
Nome e Firma esecutore prova:

Mauro Allamanno

Name and Signature of the Technical reviewer:
Nome e Firma del Revisore tecnico:

Matteo Enrico
Piacentino

Date of test samples receipt:
Data ricevimento campioni:

27/09/2017

Date of test execution:
Data esecuzione prove:

27/09/2017

Site of test execution (if different from the address in the footer):
Località esecuzione prove (se diversa dal piè pagina):

Witness to the test:
Presenti alle prove:

Sig. Giuseppe Sanfratello
(Urmet S.p.a.)

I risultati del presente rapporto di prova si riferiscono esclusivamente al campione sottoposto a prova.
The test results contained in this Test report relate to the tested samples only.

E' ammessa la riproduzione integrale del presente Rapporto di prova da parte del Richiedente; la riproduzione parziale dev'essere autorizzata per iscritto dal Laboratorio.

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Test report n.: CLI1001241A

Revision: 00

Document name: CLI1001241A_REV00.doc

Project handler:

Mauro Allamanno

Issue date: 28/09/2017

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1 TEST SETUP

SETUP DI PROVA

1.1 IDENTIFICAZIONE CAMPIONE

SAMPLE IDENTIFICATION

1.1.1	Product/material subjected to test: <i>Prodotto/materiale sottoposto a prova:</i>	Electrical equipment
1.1.2	Description: <i>Descrizione:</i>	Socket box
1.1.3	Level (Series product, prototype, etc.): <i>Livello (Prodotto di serie, prototipo, ecc.):</i>	Prototype
1.1.4	Part number: <i>Codice prodotto:</i>	None
1.1.5	Serial number: <i>N° Matricola:</i>	None
1.1.6	Sample identification code: <i>Codice di identificazione</i>	317458
1.2	AUXILIARY DEVICES <i>DISPOSITIVI AUSILIARI</i>	None.
1.3	TEST CONFIGURATION <i>CONFIGURAZIONE DI PROVA</i>	Test execution only
1.4	DIAGNOSTIC SYSTEM <i>SISTEMA DIAGNOSTICO</i>	Naked eye visual internal inspection after IPX7 test

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2 TEST LIST

ELENCO DELLE PROVE

Test Description	Method	Standardized	Differences
2.1 TEST FOR SECOND CHARACTERISTIC NUMERAL 7 <i>PROVA PER LA SECONDA CIFRA CARATTERISTICA NUMERO 7</i>	CEI EN 60529:1997/A2:2014	Yes	None

3 TEST EQUIPMENT USED

APPARECCHIATURE UTILIZZATE

Description	Manufacturer	Model	Serial no./ID	Used in test n.:
Thermohygrometer	Gemini	Tinytag View2 TV-4500	673720 TIG_167	2.1
Digital chronometer	Han hart	Magma Pro Model: 237.1952-00	240910 CRN_36	2.1
Flexometer	Usag	981 G	14/576 FLE_179	2.1
IP Tank	P.P.E.	Tank1000	23_VAS	2.1
Thermometer with probe	Blinky	Model: SH-102 Code: 95885-10/0	1207R02745 TIG_168	2.1
Demineralizer	NOBEL	RO 201D	102_DEM	2.1

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4 ENVIRONMENTAL CONDITIONS

CONDIZIONI AMBIENTALI

4.1 ROOM TEMPERATURE TEMPERATURA AMBIENTE

22 °C ± 2,3 °C

4.2 RELATIVE HUMIDITY UMIDITA' RELATIVA

42 % ± 7 %

5 MEASUREMENT UNCERTAINTY

INCERTEZZA DI MISURA

Measurement uncertainties was estimated as expanded uncertainty obtained multiplying the standard uncertainty by the coverage factor k corresponding to a confidence level of about 95%. Declared uncertainties are obtained with factor k=2 except if otherwise specified.

Measurement	Expanded uncertainty	Found in test n.:
Time	± 0,58 s	2.1
Lenght	± 7,2 mm	2.1

6 SAMPLING PLAN

PIANO DI CAMPIONAMENTO

Sample selected by the customer.

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7 TEST AND/OR MEASUREMENT RESULTS

RISULTATI DELLE PROVE E/O MISURE

7.1 TEST FOR SECOND CHARACTERISTIC NUMERAL 7

PROVA PER LA SECONDA CIFRA CARATTERISTICA NUMERO 7

7.1.1 TEST OBJECTIVE

SCOPO DELLA PROVA

Test performed in order to verify the degree of protection provided by the enclosures (IPX7).

7.1.2 TEST DESCRIPTION

DESCRIZIONE DELLA PROVA

The device under test was completely immersed in water so that the following conditions were satisfied:

- the lowest point of enclosures were located at 1000 mm below the surface of the water
- the duration of test was **30 minutes**.

7.1.3 TEST RESULTS

RISULTATI DI PROVA

At the end of test, a naked eye visual internal inspection was made: **NO WATER WAS FOUND inside the enclosure** (see photo at § 9.1).

The sample **can be classified IPX7 degree. The requirements specified in the §14.3 of the CEI EN 60529:1997 standard were satisfied.**

The criteria by which the results are expressed are given in the standards and/or in the client specification listed in paragraph 2 of this technical report.

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8 REMARKS

NOTE

The configuration has been supplied by the customer.

La configurazione e' stata fornita dal cliente

The customer is responsible for the paragraph 1.1 reported data and for the configuration of the tested EUT.

Il cliente e' responsabile per i dati riportati al paragrafo 1.1 (Identificazione campione) e per la configurazione dell'EUT testato

The sample under test has been returned to the customer.

Il campione testato é stato restituito al cliente.

Water temperature 21 °C sample temperature 23° C

Temperatura dell'acqua pari a 21 °C, temperatura del campione pari a 23 °C

9 APPENDIX

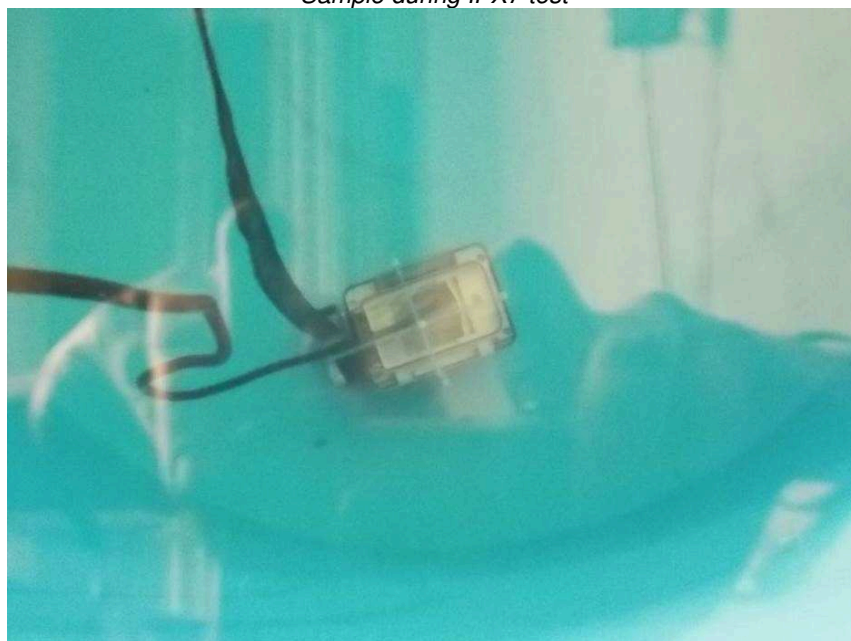
APPENDICE

None

9.1 PHOTO DOCUMENTATION

DOCUMENTAZIONE FOTOGRAFICA

Sample during IPX7 test



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Visual internal inspection after IPX7 test



Visual internal inspection after IPX7 test



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Visual internal inspection after IPX7 test



Visual internal inspection after IPX7 test



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9.2 ATTACHMENTS

ALLEGATI

None

10 SUMMARY

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